

Institute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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Sheet 1 of 3

**Complete if Known**

Application Number	10/722,032
Filing Date	November 25, 2003
First Named Inventor	Martin Goldberg
Group Art Unit	
Examiner Name	
Attorney Docket Number	03848-00094

**U.S. PATENT DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
U	1	US- 4,016,855	04-12-1977	Mimata	
U	2	US- 4,401,796	08-30-1983	Itakura	
U	3	US- 4,458,066	07-03-1984	Caruthers et al.	
U	4	US- 4,500,707	02-19-1985	Caruthers et al.	
U	5	US- 4,507,433	03-26-1985	Miller et al.	
U	6	US- 5,143,854	09-01-1992	Pirung et al.	
U	7	US- 5,202,231	04-13-1993	Drmanac et al.	
U	8	US- 5,242,974	09-07-1993	Holmes	
U	9	US- 5,384,261	01-24-1995	Winkler et al.	
U	10	US- 5,424,186	06-13-1995	Fodor et al.	
U	11	US- 5,445,934	08-29-1995	Fodor et al.	
U	12	US- 5,489,678	02-06-1996	Fodor et al.	
U	13	US- 5,492,806	02-20-1996	Drmanac et al.	
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U	19	US- 5,624,711	04-29-1997	Sundberg et al.	
U	20	US- 5,631,734	05-20-1997	Stern et al.	
U	21	US- 5,639,603	06-17-1997	Dower et al.	
U	22	US- 5,667,972	09-16-1997	Drmanac et al.	
U	23	US- 5,695,940	12-09-1997	Drmanac et al.	
U	24	US- 5,700,637	12-23-1997	Southern	
U	25	US- 5,723,289	03-03-1998	Eaton et al.	

**FOREIGN PATENT DOCUMENTS**

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		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				
U	26	GB 2182336	05-13-1987	Nippon Telegraph		
U	27	WO 92/10092	06-25-1992	Affymax Technologies		
U	28	WO 93/09668	05-27-1993	Affymax Technologies		
U	29	WO 94/10128	05-11-1994	Affymax Technologies		

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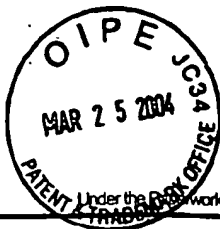
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PTO/SB/08B(10-01)

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Sheet 2 of 3

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Application Number	10/722,032
Filing Date	November 25, 2003
First Named Inventor	Martin Goldberg
Group Art Unit	
Examiner Name	
Attorney Docket Number	03848-00094

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<i>u</i>	30	US- 5,764,518	06-09-1998	Collins	
<i>u</i>	31	US- 5,837,832	11-17-1998	Chee et al.	
<i>u</i>	32	US- 5,945,334	08-31-1999	Besemer et al.	
<i>u</i>	33	US- 6,225,625	05-01-2001	Pirrung et al.	
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		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				
<i>u</i>	48	WO 95/00530	01-05-1995	Affymax Technologies		
<i>u</i>	49	WO 95/33846	12-14-1995	Affymax Technologies		
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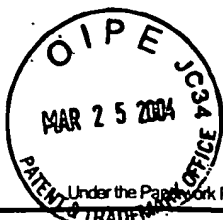
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Sheet 3 of 3

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Application Number	10/722,032
Filing Date	November 25, 2003
First Named Inventor	Martin Goldberg
Group Art Unit	
Examiner Name	
Attorney Docket Number	03848-00094

### OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
u	57	Atkinson et al., "Solid-Phase Synthesis of Oligodeoxyribonucleotides by the Phosphitriester Method," IRL Press, Gait, ed., Washington, D.C., Chapt. 3, pp. 35-81 (1984)	
	58	Barnett et al., "Debenzoylation of N-Benzoylnucleoside Derivatives with Ethylenediamine-Phenol," <i>Tetrahedron Lett.</i> , 22:991-994 (1981)	
	59	Beaucage et al., "Deoxynucleoside Phosphoramidites -- A New Class of Key Intermediates for Deoxypolynucleotide Synthesis," <i>Tetrahedron Lett.</i> , 22(20):1859-1862 (1981)	
	60	Caruthers et al., "New Methods for Synthesizing Deoxynucleotides," <i>Genetic Eng.</i> , 4:1-17 (1982)	
	61	Feldman et al., "Gray Code Masks for Sequencing by Hybridization," <i>Genomics</i> , 23:233-235 (1994)	
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	63	Froehler et al., "Nucleoside H-Phosphonates: Valuable Intermediates in the Synthesis of Deoxypolynucleotides," <i>Tetrahedron Lett.</i> , 27(4):469-472 (1986)	
	64	Guo et al., "Direct Fluorescence Analysis of Genetic Polymorphisms by Hybridization with Oligonucleotide Arrays on Glass Supports," <i>Nucleic Acids Res.</i> , 22(24):5456-5465 (1994)	
	65	Hogrefe et al., "Deprotection of Methylphosphonate Oligonucleotides Using a Novel One-Pot Procedure," <i>Nucleic Acids Res.</i> , 21(9):2031-2038 (1993)	
	66	Jones, "Preparation of Protected Deoxyribonucleosides," <i>Oligonucleotide Synthesis: A Practical Approach</i> , IRL Press, Gait, ed., Washington, D.C., Chapter 2 (1984)	
	67	Matteucci et al., "Synthesis of Deoxypolynucleotides on a Polymer Support," <i>J. Am. Chem. Soc.</i> , 103(11):3185-3191 (1981)	
	68	McGillis, "Lithography," <i>VLSI Technology</i> , McGraw-Hill, Chapt. 7, pp. 267-301 (1983)	
	69	Pease et al., "Light-Generated Oligonucleotide Arrays for Rapid DNA Sequence Analysis," <i>Proc. National Acad. Sci. USA</i> , 91:5022-5026 (1994)	
	70	Polushin et al., "Rapid Deprotection Procedures for Synthesis Oligonucleotides," <i>N.A.R. Symp. Ser.</i> , No. 24, pp. 49-50 (1991)	
	71	Reichmanis et al., "O-Nitrobenzyl Photochemistry: Solution vs. Solid-State Behavior," <i>J. Polymer Sci. Polymer Chem. Ed.</i> , 23:1-8 (1985)	
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	73	Sinha et al., "Polymer Support Oligonucleotide Synthesis XVIII: Use of β-cyanoethyl-N, N-dialkylamino/N-morpholinomono-chloro Phosphoramidite of Deoxynucleosides for the Synthesis of DNA Fragments Simplifying Deprotection and Isolation of the Final Product," <i>Nucl. Acids Res.</i> , 12(11):4539-4557 (1984)	
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u	75	Young and Davis, "Efficient Isolation of Genes by Using Antibody Probes," <i>Proc. National Acad. Sci. USA</i> , 80:1194 (1983)	
Examiner Signature	Berli		Date Considered 5/12/05

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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1

1

of

2

Attorney Docket Number

**Complete if Known**

Application Number

10/722,032

**Filing Date**

November 25, 2003

**First Named Inventor**

Martin Goldberg et al

**Art Unit**

1646

**Examiner Name**

Unknown

Attorney Docket Number

**1084D**

## U.S. PATENT DOCUMENTS

[illegible]

## FOREIGN PATENT DOCUMENTS

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Signature**

Date Considered

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STATEMENT BY APPLICANT**

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Sheet 2 of 2

**Complete if Known**

Application Number	10/722,032
Filing Date	November 25, 2003
First Named Inventor	Martin Goldberg et al
Art Unit	1646
Examiner Name	Unknown
Attorney Docket Number	1084D

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
<i>Ma</i>	F	Guo, Zhiqiang; Pfundheller, Henrik M.; Sanghvi, Yogesh S. Organic Process Research & Development (1998), 2(6), 415-417.	
<i>Mc</i>	G	Carlo L. Scremin, Liang Zhou, Kasturi Srinivasachar, Serge L. Beaucage; J. Org. Chem. 1994; 59:1963-1966.	
<i>Ma</i>	H	W. K-D. Brill; Tetrahedron 1994; 35:3041-3044.	
<i>Ma</i>	I	Gough, G. R.; Brunden, M. J.; Gilham, P. T. Tetrahedron Letters (1981), 22(42), 4177-80	
<i>Ma</i>	J	Sanghvi, Yogesh S.; Ravikumar, V. T.; Scozzari, Anthony N.; Cole, Douglas L. Development Chemistry and Pharmaceuticals, Isis Pharmaceuticals, Inc., Carlsbad, CA, USA. Pure and Applied Chemistry (2001), 73(1), 175-180.	
<i>Ma</i>	K	Jiri SMRT, Synthesis of Oligodeoxynucleotides Eliminating the Use of Acetonitrile, Collect Czech Chem Commun. (Vo. 58) (1993).	

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